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Appln No. 10/634,337
Amdt date September 24, 2007
Reply to Office action of June 13, 2007

9/30/07

J.L

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application. The claims are identical to the claims listed in the amendment mailed September 7, 2007. A clerical error has been corrected to show full claim 18.

Listing of Claims:

1. (Currently Amended) A display panel for image display using a voltage programming method, said display panel comprising a plurality of data lines for transferring a data voltage representing an image signal, a plurality of scan lines for transferring a selection signal, and a plurality of pixel circuits, each pixel circuit being coupled to a corresponding said data line and two adjacent said scan lines, each pixel circuit comprising:

a display element capable of displaying a portion of an image, the image portion corresponding to a quantity of applied current;

a first transistor having a main electrode and a control electrode;

a capacitor coupled between the main electrode and the control electrode of the first transistor, wherein the first transistor is capable of generating the applied current in response to voltage between the main electrode and the control electrode;

a second transistor having a control electrode coupled to the control electrode of the first transistor, the second transistor being configured to operate as a diode;

a first switching element coupled to a main electrode of the second transistor, wherein the first switching element transfers the data voltage from the data lines to the second transistor in response to the selection signal from one of the two adjacent scan lines, so as to charge the capacitor with the data voltage;

a second switching element for transferring a precharge voltage to the control electrode of the first transistor in response to a first control signal before the data voltage is supplied; and

a third switching element being turned off in response to a second control signal for electrically isolating the first transistor from the display element, so as to prevent a current from

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Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A display panel for image display using a voltage programming method, said display panel comprising a plurality of data lines for transferring a data voltage representing an image signal, a plurality of scan lines for transferring a selection signal, and a plurality of pixel circuits, each pixel circuit being coupled to a corresponding said data line and two adjacent said scan lines, each pixel circuit comprising:

a display element capable of displaying a portion of an image, the image portion corresponding to a quantity of applied current;

a first transistor having a main electrode and a control electrode;

a capacitor coupled between the main electrode and the control electrode of the first transistor, wherein the first transistor is capable of generating the applied current in response to voltage between the main electrode and the control electrode;

a second transistor having a control electrode coupled to the control electrode of the first transistor, the second transistor being configured to operate as a diode;

a first switching element coupled to a main electrode of the second transistor, wherein the first switching element transfers the data voltage from the data lines to the second transistor in response to the selection signal from one of the two adjacent scan lines, so as to charge the capacitor with the data voltage;

a second switching element for transferring a precharge voltage to the control electrode of the first transistor in response to a first control signal before the data voltage is supplied; and

a third switching element being turned off in response to a second control signal for electrically isolating the first transistor from the display element, so as to prevent a current from being applied to the display element while the capacitor is being charged with the precharge voltage; ~~voltage.~~ voltage.

wherein the selection signal from said one of the two adjacent scan lines is used as the second control signal.